

# Technical Data Sheet

Product features and properties CF <sup>TRIM</sup>  
release: 03/2014

**Trade Name** **IM – OX – 05**

**Proct Family** **CF<sup>TRIM</sup>**

## Characteristics

IM – OX – 05 is a PAN-based chopped high performance fiber. Cut in length of 6, 12, 18 up to max. 48 mm the „intermediate modulus“ (IM = high stiffness /high expansibility) fiber leads to excellent mechanical properties especially in Epoxy-matrices. The fiber's virgin sizing is Epoxy based.



## Product benefits

- Aerospace grade
- High strength
- Low density
- Good electric and thermal conductivity
- Very high stiffness
- Excellent fatigue and creep resistance
- Good chemical resistance

## Reprocessing method

CF <sup>TRIM</sup> grades are reclaimed carbon fiber products based on utilizing first class quality post-industrial excess carbon fibers. CF <sup>TRIM</sup> fibers have not been heat treated or chemically altered. They keep virgin equal properties while carefully cut into lengths of 6, 12 or 18 mm within tolerances of +/- 0,5 mm.

## Application qualification

Perfect wetting and bonding in Epoxy resin based systems. Approved for Aerospace applications. Also suitable for vinyl ester, polyester or polyurethane systems.

## Health and safety

Carbon fiber products do not require hazardous product labelling. Take measures to prevent the build up of electrostatic charge. Avoid dust formation. Carbon fibers based on filaments with diameters >4µm are not respirable. (please see MSDS)

Carbon fiber products are not considered as hazardous goods by transport regulations. They are not part of the hazardous classification listed in the international regulations.

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## Properties (guideline)

### Fiber

Filaments	[K]	12K
Tow's yield	[tex]	450
Filament diameter	[µm]	5
Density	[g/cm³]	1,78
Sizing amount	[%]	0,2 - 0,7

### Mechanical data

Tensile strength	[Mpa]	5.600
Tensile modulus	[GPa]	276
Strain	[%]	1,9
Specific heat capacity	[cal/g°C]	0,27
Heat coefficient	[W/mK]	6,83
Thermal expansion coefficient	10 <sup>-6</sup> /K]	-0,63
Specific electrical resistance	[Ω cm]	1,7x10 <sup>-3</sup>

### Packaging

PE bags	[kg]	20
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